CLASSIFICATION CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM

FOREIGN DOCUMENTS OR RADIO BROADCASTS CD NO.

COUNTRY USSR

SUBJECT

Economic; Technological - Turbines, boilers

HOW PUBLISHED

Г

Daily newspapers

WHERE

USSR **PUBLISHED** 

DATE **PUBLISHED** 11 Jun-17 Nov 1953

LANGUAGE Russian NO. OF PAGES 3

INFORMATION 1953

DATE DIST. 15 Jun 1954

SUPPLEMENT TO REPORT NO.

REPORT

DATE OF

THE UNITED STATES, WITHIN THE MEANING OF TITLE 18. SECTIONS 78 AND 184. UT ALL U.S. CODE, AS AMENDED. ITS TRANSMISSION OF REV LATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON PROHIBITED BY LAY, THE REPRODUCTION OF THIS FORM IS PROHIBITED

THIS IS UNEVALUATED INFORMATION

SOURCE

As indicated

## LENINGRAD PLANT COMPLETES 100,000TH TURBINE; NEW POWER EQUIPMENT

HIGH-FREQUENCY WAVES, GAMMA RAYS USED IN CHECKING NEW MACHINE -- Leningradskaya Pravda, 24 Oct 53

The steam turbine shop of the Leningrad Metal Plant imeni Stalin is completing its 100,000th turbine. It has twice the rated capacity of the entire Vol-khovekaya GES. [The installed capacity of the Volkhovekaya GES is 58,000 kilowatts. See Electric Power Development in the USSR, p 87, Benjamin Weitz, Editor, Moscow, INRA Fublishing Society 1936].

More than a month's work will have been put in when the turbine is finished; this is approximately one thirteenth the time it took to build the first turbine of this type just after the war.

Before the turbine is pronounced ready for operation, it will be carefully examined for flaws by means of an ultra-high frequency defectoscope. It will also be scrutinized with the aid of gamma rays, a color-spectrum defectoscope, and a magnetic defectoscope.

The plant's hydroturbine shop has already shipped out the first heavy parts for the Kuybyshevskaya GES hydroturbines. Recently, the shop received from the Gor'kiy Machine Tool Building Plant a tracer-milling machine for machining turbine blades. The shop is now setting up some large unit-type machine tools to handle other parts for the Kuybyshevskaya GES turbines.

Machinists are applying various new tools and attachments. For example, a ring-type trepan drill, built by the plant Technical Division, is used to cut holes in blades and rotors for the Kuybyshevskaya GES turbines. The machine cuts openings 160 millimeters in diameter in one pass.

50X1-HUM

CONFIDENTIAL CLASSIFICATION STATE NAVY NSRB DISTRIBUTION

Sanitized Copy Approved for Release 2011/09/14: CIA-RDP80-00809A000700190077

50X1-HUM

CONFIDENTIAL

50X1-HUM

Moscow, Pravda, 3 Nov 53

The Leningrad Metal Plant iméni Stalin has just completed tests on a 100,000-kilowatt steam turbine. Engineers are now at work aligning the casings of the new turbine on the stand. A new method enables them to align both the high pressure and the low pressure casing at the same time, cutting down the time for this operation by 50 percent.

Recently, a 25,000-kilowatt steam turbine successfully passed its plant tests.

On 31 October, the hydroturbine shop completed its second direct-flow hydroturbine. [ for a description of the first direct-flow hydroturbine built by the Leningrad Metal Plant imeni Stalin.]

Ashkhabad, Turkmenskaya Iskra, 11 Jun 53

By changing the design of the diaphragm, designers at the Leningrad Metal Plant imeni Stalin have succeeded in reducing the weight of a 200-ton, 100,000-kilowatt, high-pressure steam turbine by nearly 70 tons. This change effects a considerable saving in stainless steel. The Polytechnical Institute imeni Kalinin and other scientific establishments aided the plant in achieving this metal saving.

SMELTING PRODUCTION GOES INTO GES TURBINES -- Leningradskaya Pravda, 17 Nov 53

The open-hearth workers at the Leningrad Plant imeni Lenin have met their year plan for production of molten steel 46 days early. While the plant has succeeded in performing 65 percent of its smelting on a high-speed schedule, it has also increased the between-repairs operating term of its furnace from 160 to 235 melts.

Much of the metal produced by the smelters has gone into cast parts for the hydroturbines for the Kuybyshevskaya, Gor'kovskaya, and other GES projects.

Ashkhabad, Turkmenskaya Iskra, 11 Jun 53

A 14,000-kilowatt steam turbine recently built at the Leningrad Plant imeni Lenin is  $1\ 1/2$  tons lighter than previous models [of this capacity]. An 18,000-kilowatt turbine, designed by engineers V. Zvyagintsev and R. Voskresenskiy, will be one half the weight of models [of the same capacity] now in operation but will require one third the amount of nonferrous metal.

PRODUCE ABOVE-PLAN TURBINES -- Vil'nyus, Sovetskaya Litva, 11 Nov 53

The Kaunas Pergale Plant turned out several above-plan turbines during October. For the fourth consecutive time, the plant has won first place in an all-Union competition, and the transferable Red Banner of the Council of Ministers USSR and the All-Union Central Council of Trade Unions.

TURBINE PLANT BUILDS MACHINE TOOLS FOR MTS -- Moscow, Trud, 15 Nov 53

The Syzran' Hydroturbine Plant, joining other industrial enterprises in rendering aid to MTS, has built ten metalworking machine tools for the Gubinskaya, Usol'skaya, and Shigenskaya MTS.

- 2 -

CONFIDENTIAL

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700190077-	5
--	---

50X1-HUM

COMP	IDENTIAL
COTT	TUCKLING

NEW BOILER SUITABLE FOR HOUSES, APARTMENTS -- Vil'nyus, Sovetskaya Litva, 15 Nov 53

The Kaunas Neris Plant is the first in the Lithuanian SSR to establish production of a new type of small boiler for central heating purposes. The boilers are designed for use in heating entire houses as well as individual apartments.

The first groups of the new boilers have been shipped to Moscow and to Leningrad. In the next few months, production of the boilers should increase considerably.



50X1-HUM

- 3 -